CLAIM LISTING

1.   (Currently Amended) A method for classifying an audio signal, said method comprising:

Spectrally flattening the portion of the audio signal, thereby resulting in a spectrally flattened decimated portion of the audio signal;

Calculating a plurality of linear prediction coefficients (LPC) for the spectrally flattened ~~a~~ portion of the audio signal;

Inverse filtering the spectrally flattened portion of the audio signal with the plurality of linear prediction coefficients (LPC), thereby resulting in a residual signal;

Measuring the residual energy of the residual signal; and

Comparing the residual energy to a threshold~~; and~~

~~Decimating the portion, thereby causing the portion to comprise a predetermined number of samples~~.

2.   (Original) The method of claim 1, further comprising:

Classifying the portion of the audio signal as music, if the residual energy exceeds the threshold; and

Classifying the portion of the audio signal as speech, if the threshold exceeds the residual energy.

3.   (Original) The method of claim 1, wherein the portion of the audio signal comprises a frame.

4-20. (Cancelled)

21. (Currently Amended) The method of claim 1, further comprising:

Classifying the audio signal based on the comparison of the residual energy of the ~~spectrally flattened~~ decimated portion ~~comprising the predetermined number of samples~~ to the threshold.

22. (New) The method of claim 1, further comprising:

Decimating the portion of the audio signal, thereby resulting in a decimated portion of the audio signal; and

wherein spectrally flattening the portion of the audio signal further comprises spectrally flattening the decimated portion of the audio signal.

23. (New) A system for classifying an audio signal, said method comprising:

A first circuit for spectrally flattening the portion of the audio signal, thereby resulting in a spectrally flattened decimated portion of the audio signal;

A second circuit for calculating a plurality of linear prediction coefficients (LPC) for the spectrally flattened ~~a~~ portion of the audio signal;

An inverse filter for inverse filtering the spectrally flattened portion of the audio signal with the plurality of linear prediction coefficients (LPC), thereby resulting in a residual signal;

A third circuit for measuring the residual energy of the residual signal; and

A fourth circuit for comparing the residual energy to a threshold.

24. (New) The system of claim 23, further comprising:

Logic for classifying the portion of the audio signal as music, if the residual energy exceeds the threshold and classifying the portion of the audio signal as speech, if the threshold exceeds the residual energy.

25. (New) The system of claim 23, wherein the portion of the audio signal comprises a frame.

26. (New) The method of claim 23, further comprising:

A decimator for decimating the portion of the audio signal, thereby resulting in a decimated portion of the audio signal; and

wherein the first circuit for spectrally flattening the portion of the audio signal further comprises spectrally flattening the decimated portion of the audio signal.